WHAT IS CLAIMED IS:

1. A method for retransmitting a packet in a mobile communication system, comprising:

a) establishing a waiting time for retransmitting a packet when the packet which is transmitted to the receipt unit from a transmission unit does not include an acknowledgement (ACK) message;

b) an automatic repeat request (ARQ) transmitter retransmitting the packet when the waiting time expires; and

c) the ARQ transmitter determining whether a maximum management time of an ARQ block expires, moving to a discard state in order to discard the packet in a buffer of the transmission unit when the maximum management time of an ARQ block expires, and waiting for an ACK message,

wherein the transmission unit, in the discard state, transmits a discard message for the packet to the receipt unit, and discards the packet in the buffer transmission unit regardless of the discard message transmission when receiving the ACK message.

2. The method of claim 1, wherein the ACK message waiting in the discard state comprises an ACK message for the packet and an ACK message for the discard message.

3. The method of claim 2, further comprising:

d) establishing the-maximum number of times of packet retransmissions to the receipt unit;

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f) determining whether a negative acknowledgement (NACK) message indicating an error of the packet transmission is received from the receipt unit, and retransmitting the packet when the NACK message is received; and

g) moving to the discard state when the number of times of packet retransmissions exceeds the maximum number of times of packet retransmissions after step f).

4. The method of claim 3, wherein the ACK message is an ARQ feedback message, and the transmission unit is managed to discard the packet when the transmission unit receives the ACK message.

5. The method of claim 3, wherein the maximum number of times of retransmissions is defined as a first ARQ parameter ARQ_MAX_RETRANSMIT in step d).

6. The method of claim 3, wherein the waiting time is defined as a second ARQ parameter ARQ_RETRY_TIMEOUT in step a).

7. The method of claim 3, wherein the ARQ transmitter processes so that step b) corresponds to step f).

8. The method of claim 3, wherein the packet is retransmitted in step (f) when the NACK message is received in step b).

9. A method for receiving an automatic repeat request (ARQ) transmitting a confirmation message indicating a receipt success or a receipt failure for a received sequence block or a discard message, the method comprising:

a) determining whether the sequence number of the block for the ARQ is in a receipt window range when the block for the ARQ arrives, and discarding the block when the number is out of the range;

b) determining whether the block is duplicated when the number is in the receipt window range, and processing the block to be acknowledged after a predetermined time when the block is duplicated in step a);

c) adding the block sequence number corresponding to the block to a list of the block sequence numbers to be acknowledged when the block is not duplicated, and storing the block to a buffer in step b); and

d) determining whether the block sequence number of the stored block corresponds to a sequence number of a receipt window start block, updating the sequence number of the receipt window start block when the block sequence number of the stored block corresponds to the sequence number of the receipt window start block, and processing the block to be acknowledged after a predetermined time.

10. The method of claim 9, further comprising:

e) determining whether the sequence number of the stored block is greater than a sequence number of a block following the received block when the sequence number of the stored block is different from the sequence number of the receipt window start block in step d); and

f) updating the block sequence number after the received block number when the sequence number of the stored block is greater than the

sequence number of the block after the received block.

11. The method of claim 9, further comprising in step d),

determining whether the sequence number of the stored block corresponds to the sequence number of the block following the received block, and increasing the sequence number of the block following the received block by one when the block sequence number of the stored block does not correspond to the sequence number of the receipt window start block.

12. A computer readable medium having a program for retransmitting a packet in a mobile communication system, the program comprising:

a) establishing a waiting time for retransmission when a packet transmitted to a receipt unit from a transmission unit has no ACK message;

b) an ARQ transmitter retransmitting the packet when the waiting time expires; and

c) the ARQ transmitter determining whether a maximum management time of an ARQ block expires, moving to a discard state for the purpose of discarding the packet in a buffer of the transmission unit when the maximum management time of the ARQ block expires, and waiting for an ACK message,

wherein the transmission unit in the discard state transmits a discard message for the packet to the receipt unit, and discards the

packet in the buffer of the transmission unit regardless of the discard

message transmission when receiving the ACK message.

13. The program of the claim 12, further comprising:

d) establishing the maximum number of times for retransmitting

the packet to the receipt unit;

f) determining whether an NACK message indicating an error of

the packet transmission is received from the receipt unit, and

retransmitting the packet when the NACK message is received; and

g) moving to the discard state when the number of times of

retransmissions exceeds the maximum number of times of

retransmissions after step f).